Panasonic®

User Guide

900 MHz
VB-44240A
Cordless Telephone

Issued July 2001

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Precautions

⚠ **Warning**: Products powered by electricity should be serviced only by experienced professional technicians. Any attempt by others to service the products dealt with in this manual could result in serious injury or death.

⚠ **Warning**: The 900 MHz cordless telephone and associated equipment described in this manual are not waterproof. To reduce the risk of fire, electrical shock, or damage to equipment, DO NOT expose the equipment to rain or moisture.

Caution: This equipment contains a Rechargeable Nickel-Cadmium Battery***.***

- Do not short-circuit the battery.
- Do not charge the battery in any charger other than the one specified in this Guide. Using another charger may damage the battery, or cause the battery to explode.
- Do not remove or damage the battery casing.
- Never throw the battery into a fire, disassemble it, or heat it.

The nickel cadmium battery you have purchased is recyclable. At the end of its useful life, under various state and local laws, it is illegal to dispose of this battery into your municipal waste stream.

FCC Warning

This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used properly, that is, in strict accordance with the instruction manual, may cause interference to radio and television reception. This equipment has been tested and found to comply with the limits for a Class A computing device in Subject J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference, take one or more of the following actions:

1. Place each base station at least five feet apart.
2. Raise the base station antenna to the vertical position.
3. Place the base station on top of a desk or on higher shelves.
4. Avoid locations surrounded by metal surfaces.

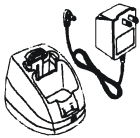
Checking Your Package

Before reading the User Guide and using the Panasonic 900 MHz Cordless Telephone, take a few minutes to check the contents of your package.

You should have the following:

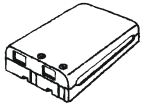
Handset

Base Station with
AC Adapter



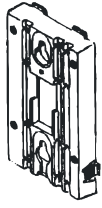
Charging Unit with
AC Adapter

Checking Your Package

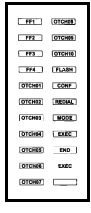


800 mAH DC 3.6V
Rechargeable
Battery

Belt Clip



Wall Mount Adapter



Function Label

Telephone Cable

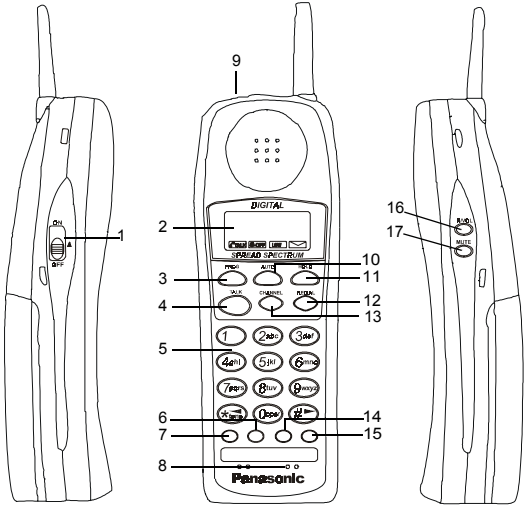
Checking Your Package

Understanding Your Telephone

The Panasonic 900 MHz VB-44240A Business Phone is a digital cordless telephone that allows you to stay connected to your Panasonic PBX - even when you are away from the desk. This phone includes:

- Digital Spread Spectrum
- Range of one mile (approximate)
- 2-line LCD display with 16 digits per line
- Any-key answer
- Vibrator alert
- 10 channels, selectable with the handset
- 6 Function keys (F1 - F4 backlighted)
- 6 Hours of talk time/4 days standby time on one battery charge
- Headset Jack (2.5 mm)

Handset features



Handset Features

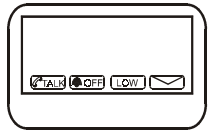
Number	Feature
1	Ringer ON/OFF switch
2	Message Display
3	FF-6 (programmable) Default: PROGRAM key
4	TALK key

Number	Feature
5	Numeric Keypad
6	FF-2 (programmable)
7	FF-1 (programmable)
8	Microphone
9	Headset Jack
10	FF-5 (programmable) Default: AUTO key
11	HOLD key
12	REDIAL key
13	CHANNEL key
14	FF-3 (programmable)
15	FF-4 (programmable)
16	Volume (R/VOL) key
17	Mute (MUTE) key

HANDSET OVERVIEW

The 900 MHz handset has a two-line LCD display. Each line displays up to 16 alphanumeric characters. The display can also show up to four icons:

(Talk, Ringer Off, Battery Low, and Message)



Handset Modes

Your handset operates primarily in these modes: Standby, Talk, or Programming.

When you place a call, receive a call, or when you are in a converstation, the handset is in *Talk* mode and the Talk icon TALK is displayed. The Talk icon blinks when Muting is turned on or during channel changes.

When you place a call, the handset LCD display shows the number you are dialing. When receiving an incoming call, the display shows information about the calling party such as phone number and name (if incoming line is equipped with Caller ID).

When you are not receiving a call or dialing, the handset goes into *Standby* mode. The display is blank, unless the 900 Mhz handset or the key telephone has a call holding.

If either of these conditions occurs, the second line of the handset display shows the identity of the party on

hold. If the holding call is diconnected, the LCD goes blank.

For information about programming mode, see *"Programming Your Handset" on page 31*.

Ringer Off Indication

The Ringer Off icon [OFF] appears if the ringer is turned off with the R/VOL switch.

Low Battery Warnings

- Standby mode: Battery Low

  icon [LOW] appears. A battery low alert tone sounds once every 15 seconds for three minutes.

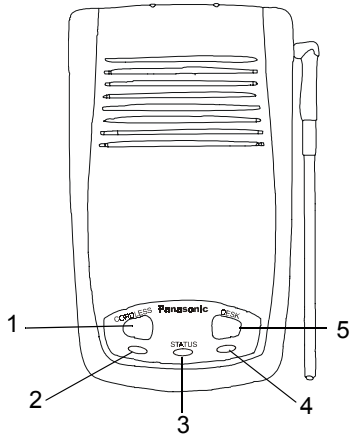
- Talk mode: The Battery Low icon [LOW] appears, and the battery low alert tone sounds once every three seconds until the conversation ends. At that time the handset goes to standby mode.

Message Waiting Indication

The Message icon [✉] : displayed when a message is waiting.

The handset can show up to 32 characters in the LCD display. If the message is longer than 32 characters, the message is displayed on two "pages". The display switches between pages at 1.5 second intervals.

Base Station Features



Number	Feature
1	CORDLESS Button
2	CORDLESS LED
3	STATUS LED
4	DESK LED
5	DESK Button

Optional Headset (VB-44249HS)

The optional Headset provides a “Hands-Free” Option for the 900 MHz phone. With the Headset installed, you can use the Belt Clip to carry the handset, and conduct a conversation using the Head Set.

To install the optional Headset, open the cover over the Headset Jack and plug the Headset in.

No other settings are needed.

Operation of the 900 MHz phone using the Headset is exactly the same as using the handset. However, you will hear through the Headset earphone, and talk through the Headset microphone. The handset earphone and microphone (mouthpiece) are disconnected when the headset is plugged in.

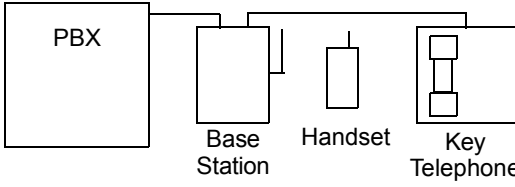
CHARGING UNIT (EXP9785)

The unique design of your 900 MHz phone allows you to place the handset in the charging unit with or without the Belt Clip attached.

The Battery Packs can be recharged either in or out of the handset.

Installing the 900 MHz Cordless Telephone

The Panasonic 900 MHz Cordless phone is installed with your existing key telephone and DBS series PBX as shown in the following illustration:



1. Selecting the Installation Location

The base station can be placed on a desk or tabletop near a standard 120V AC outlet and telephone line jack. The base station can also be mounted on a standard AT&T or GTE wall plate, or directly on a wall, using the Wall Mount Adapter.

Avoid locations surrounded by metal surfaces. Keep the base station and handset away from excessive heat and humidity, and from sources of electrical noise (motors, transformers, fluorescent lighting, or computers).

Mount the base station and your key telephone at least three to four feet apart to avoid noise from the key telephone speaker. If you are installing multiple base units, place them at least five feet apart.

2. Connecting the Telephone Cords

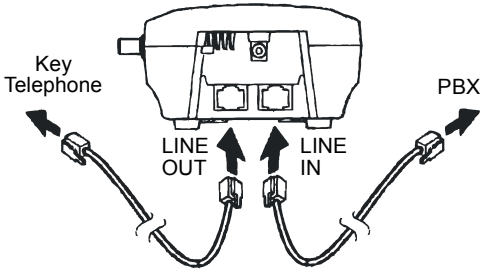
The base station for your 900 MHz phone must be connected to the Panasonic PBX. You can also connect a Panasonic key phone to the base station.

Caution:

Never install telephone wiring during a lightning storm.

Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

Connecting the Base Station to the PBX and Key Telephone

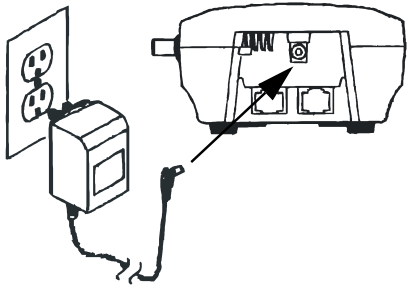


3. Applying Power

IMPORTANT! Route the power cord where it will not create a trip hazard, or where it could become chafed and create a fire or other electrical hazards.

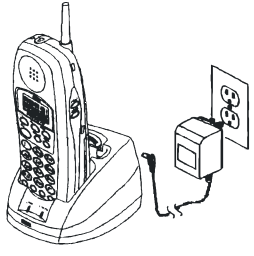
3.1 Applying Power to the Base Station

Use only the supplied AC Adapter (EXP9704).



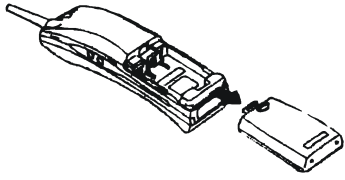
3.2 Applying Power to the Charging Unit

Use only the supplied AC Adapter (AD970).

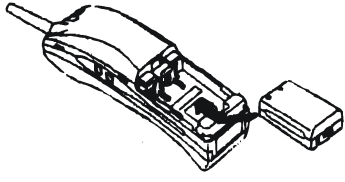


4. Installing the Handset Battery

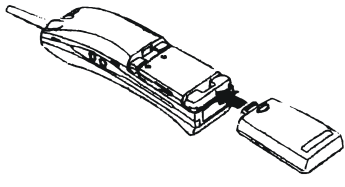
1. Remove the battery cover by pressing the latch and sliding the cover down and off of the handset.



2. Slide the battery down into the handset.



3. Place the cover and slide the cover up until it latches into the handset.



5. Charging the Handset Battery (First Time)

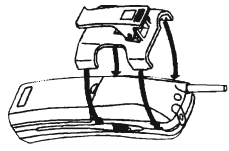
The Rechargeable Nickel-Cadmium Battery must be fully charged before using your 900 MHz phone for the first time.

1. Place the handset in the front slot of the charging unit.
2. Make sure the CHARGE indicator lights. If the CHARGE light doesn't light, check to see that the AC Adapter is plugged in, and that the handset is making good contact with the charging unit charging contacts.
3. Charge the battery without interruption for 15-20 hours.

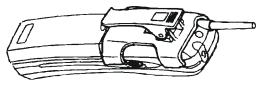
6. Attaching Belt Clip to Handset

You can use the belt clip to attach the handset to your belt or pocket for convenient portability.

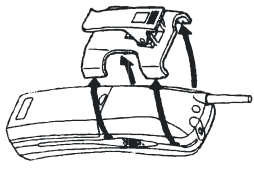
1. Locate the belt clip notches on the sides of the handset, near the top.
2. Slide the belt clip tabs into the notches.



3. Press firmly until the belt clip snaps into place.



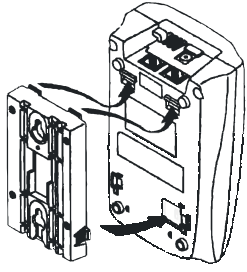
4. To remove, simply lift one side of the belt clip to pull the tabs out of the handset notches.



WALL-MOUNTING THE BASE STATION (OPTIONAL PROCEDURE)

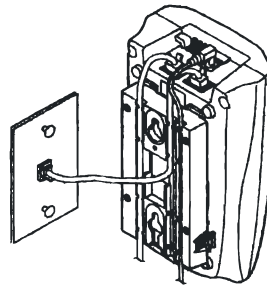
Standard Wall Plate Mounting

You can use this mounting option if you have a standard AT&T or GTE wall plate connection to the Panasonic PBX.



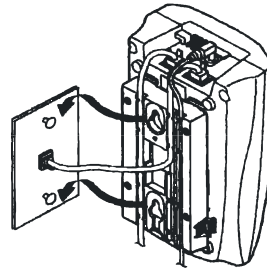
1. Slide the Wall Mount Adapter into the notches at the top of the base station. Rotate the Wall Mount Adapter down and snap it into place.
2. Plug the AC Adapter (EXP9704) into the base station.
3. Place the AC Adapter cord inside the molded channel of the Wall Mount Adapter.
4. Plug a short telephone cord into the **LINE IN** jack on the base station. Connect a telephone cord from a Panasonic key telephone to the **LINE OUT** jack. Then place the telephone cord(s) inside the molded channel(s) on the bottom of the Wall Mount Adapter.

5. Plug the other end of the short telephone cord (from the **LINE IN** jack) into the modular wall jack.



6. Place the base station on the posts of the wall plate and push down until it is firmly seated.

7. Plug the AC Adapter into a standard 120V AC wall outlet.

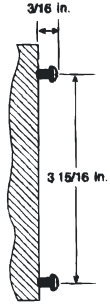


Note: You can plug the base station into an AC outlet controlled by a wall switch. This is especially convenient for base stations that are not easily accessible.
To avoid accidentally turning off the base station, do not use a wall switch that controls lights or other equipment.

Direct Wall Mounting

If you do not have a standard wall plate, you can mount the 900 MHz Cordless Telephone base station directly on a wall. Before doing so, consider the following:

- Select a location away from electrical cables, pipes, or other items behind the mounting location that could cause a hazard when screws are inserted into the wall.
- Ensure that the wall material is capable of supporting the weight of the base station.
- Use #10 screws with anchoring devices suitable for the wall material at the mounting point.



1. Insert two mounting screws in the wall, 3-15/16 inches apart. Allow about 3/16 of an inch between the wall and screw heads for mounting the base station.
2. Perform steps **1** to **3** of ***"Standard Wall Plate Mounting" on page 15*.**
3. Plug a telephone cord into the **LINE IN** jack on the base station. Connect the other end to the wall jack leading to the Panasonic PBX.
4. Plug a telephone cord from a Panasonic key telephone into the **LINE OUT** jack on the base station.

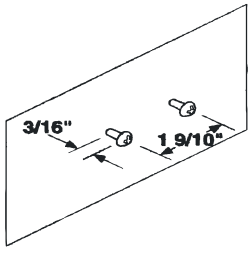
5. Place the telephone cord(s) inside the molded channel(s) on the bottom of the Wall Mount Adapter.
6. Place the base station on the posts of the wall screws and push down until firmly seated.
7. Plug the AC Adapter into a standard 120V AC wall outlet.

Wall-Mounting the Charging Unit (Optional Procedure)

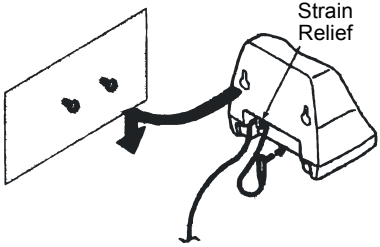
The charging unit is also designed to be wall-mounted. Before mounting your charging unit, consider the following:

- Select a location away from electrical cables, pipes, or other items behind the mounting location that could cause a hazard when inserting screws into the wall.
- Make sure the wall material is capable of supporting the weight of the charging unit.
- Use #10 screws with anchoring devices suitable for the wall material at the mounting point.

1. Insert two mounting screws 1-9/10 inches apart. Allow about 3/16 of an inch between the wall and screw heads for mounting the phone.



2. Plug the AC Adapter into the charging unit. Wrap the AC Adapter cord around the strain relief.
3. Place the charging unit on the posts of the wall screws and push down until firmly seated.

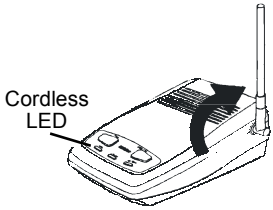


4. Plug the AC Adapter into a standard 120V AC wall outlet.

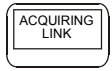
Using Your 900 MHz Cordless Telephone

Before You Begin

- Ensure that your 900 MHz phone has been installed as described in *"Installing the 900 MHz Cordless Telephone" on page 9*.
- Remove the handset from the charging unit before using the handset.
- Raise the base station antenna to the vertical position.
- Ensure that the "CORDLESS" LED on the base station is lit.



Note: When you pick up the handset and press TALK, you may see this message momentarily:



This message disappears when the base station obtains an open line from the PBX.

Placing a Call

1. Press **TALK**. You will hear a dial tone.
2. Enter the number you are calling.
3. To end the call, press **TALK**.

Answering a Call

If the handset is out of the charging unit:

- Press **TALK** or any key on the numeric keypad.

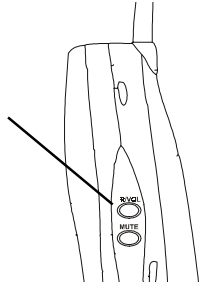
If the handset is in the charging unit:

1. Remove the handset from the charging unit. (The AutoTalk feature allows you to answer the call immediately.)
2. When you finish the call, place the handset back in the charging unit. (The AutoStandby feature automatically ends the call.)

Adjusting the Headset/Microphone Volume

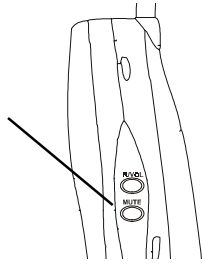
When in Talk mode (during a coversation):

Press the R/VOL key on right side of handset to select maximum, high, medium, or low earpiece volume level.



Muting the Handset Microphone

When in Talk mode (during a coversation):



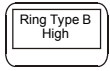
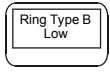
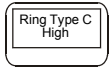
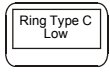
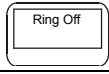
Press the Mute key on right side of the handset. The called party can no longer hear you voice or any other sounds near the handset. The Talk icon TALK blinks.

To turn off mute, press the Mute key again. Mute is also cancelled when you press the Talk button to end the conversation.

Adjusting the Ringer Volume

When in Standby mode:
Rapidly press the R/VOL key on right side of handset to select one of the following ringer volume settings:

Ringer Volume	Screen Display
Ring type A (High)	Ring Type A High
Ring type A (Low)	Ring Type A Low

Ring type B (High)	
Ring type B (Low)	
Ring type C (High)	
Ring type C (Low)	
Ring Off (Vibrate)	

Switching Calls Between Telephones

The 900 MHz cordless telephone base station allows you to switch calls between the 900 MHz handset and the key telephone.

Caution: Do not press the buttons labeled "Desk" or "Cordless" on the base station when receiving a call. Doing so may disconnect the call.

Switching a call from 900 MHz handset to key telephone

To switch during an active call:

1. Press HOLD on the 900 MHz handset.
2. Press TALK on the 900 MHz handset.
3. Press the DESK button on the base station.
4. Pick up the receiver on the key telephone.

Note:

- When the base station is operating with the key telephone, and you press the 900 MHz handset TALK button, there is no handset tone. The handset displays LINE IN USE for 5 seconds.
- If the PBX is powered off and on while the base station is in use, it may be necessary to reset the base station. You can do so by powering the base station off and on.

Switching a call from key telephone to 900 MHz handset

To switch a call from the key telephone to the 900 MHz handset during an active call:

1. Press HOLD on the key telephone.
2. Press the CORDLESS button on the base station.
3. Press TALK on the 900 MHz handset.

Note:

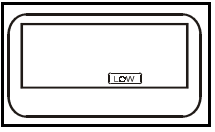
- If you are on an active call on the key telephone and you press the CORDLESS button on the base station without first pressing the **HOLD** button on the key telephone, your call will be disconnected.
- If you are on an active call on the 900 MHz handset and you press the desk button on the base station without first pressing the HOLD button on the key telephone, the transfer between phones is delayed until the call is completed. (Avoid this practice.)
- If the TALK button on the handset is pressed while the base station is switching from Desk mode to Cordless mode, the base station switches back to Desk mode.

SELECTING CHANNELS

To change the active channel, press the CHANNEL button on the handset.

Low Battery Indicator

When the battery in the handset is low and needs to be charged, you will see a message on the display.



On a Call	In Standby Mode
All keys and functions are available.	None of the buttons operate.
Handset beeps once every 3 seconds until conversation ends.	Handset beeps once every 15 seconds for 3 minutes, then stops.
Complete your call as quickly as possible.	Cannot make call and receive a call.
Replace battery within 20 seconds to continue call.	Replace battery before making a call.

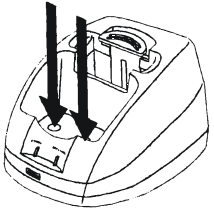
Return the handset to the charging unit for charging or replace the handset battery with another charged battery.

Recharging the Handset Battery

1. Place the handset in the front slot of the charging unit.
2. Make sure the CHARGE indicator lights. If the CHARGE light doesn't light, check to see that the AC Adapter is plugged in, and that the handset is making good contact with the charging unit charging contacts.
3. Charge the battery without interruption for 5 hours.

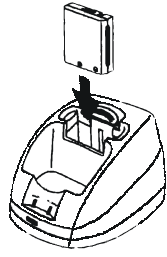
Cleaning Handset & Charging Unit Contacts

To maintain a good charge, it is important to clean all charging contacts on the handset and charging unit about once a month. Use a pencil eraser or other contact cleaner. Do not use any liquids or solvents.



Charging a Spare Battery

The Charger Unit of your 900 MHz phone is equipped to charge a spare battery with or without the handset in the front slot.



1. Slide the (optional) spare battery into the second slot in the charging unit until the retaining clip snaps over the top of the battery.

2. Make sure the BATT CHARGE indicator lights. If the BATT CHARGE indicator doesn't light, check to see that the AC Adapter is plugged in, and that the battery is making good contact with the charging unit charging contacts.

Note: When charging a battery for the first time, charge it without interruption for 15-20 hours.

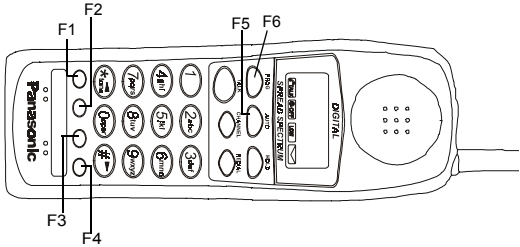
When recharging a battery, charge it without interruption for 5 hours.

3. When charging is complete, press back on the latch and remove the battery for use. Or, if you don't need the battery immediately, leave it in the charging compartment; it will not overcharge.

Programming Your Handset

The 900 MHz handset has 6 programmable function keys (F1 to F6).

The F1 to F4 keys are back lighted, so these keys can be programmed as Feature Function (FF) keys.



Note: When used with the DBS 96/72/90 and the DBS 824, LED indications of calls are only available if the handset and desk telephone FF Keys are programmed as CO keys.

Note: For detailed programming instructions, see your key telephone user manual. A large-display key telephone is recommended for programming.

1. To enter the 900 MHz handset programming mode from standby mode, press and hold the * and # buttons. While holding those buttons, press the **TALK** button. You will hear a beep

confirming that you are in programming mode. By default, the F1 key will be selected.

2. Choose the key you want to program. Scroll forward through the key selections by pressing the **R/VOL** key, or move backwards by pressing the **MUTE** key.
3. Press the "0" key to confirm your F-key selection.
4. Select the program function to assign to the F-key by pressing the **R/VOL** or **MUTE** key to move through the selections.

Program Function	Location	Display/Complete message
One Touch (OTCH) keys 1-10	Any-where (F1-F6)	OTCH xx(xx=01-10)
FLASH key	Default: F5	FLASH key
CONF key		CONF key
PROG key		PROG key
AUTO key		AUTO key
REDIAL key		REDIAL key (System Redial)
Soft-key (mode)		MODE key
Soft-key (<EXEC)		EXEC>key
Soft-key (End)		END key
Soft-key (<EXEC)		<EXEC key
No operation		NO OPERATION

5. Press the "0" key to confirm your function selection. The handset will display COMPLETE next to the assigned key number and the function assigned to that key.

You can now program the next F-key.

Note: To exit the programming mode at any time, press the TALK key. This returns the phone to Standby mode.

Note: You must press the TALK button on the handset to scroll through System Speed Dial (SSD) and Personal Speed Dial (PSD) addresses using the * and # keys.
The TALK button must also be pressed for the programmed FF keys to function (except as described in the following Note.)

Note: When Function Keys are programmed as the MCO key, CO key, DN key, or BLF key, they can be used without first pressing the TALK button.

Troubleshooting

If your 900 MHz cordless telephone is not performing to your expectations, try these steps. If you are still unable to resolve the problems, contact your PBX Administrator.

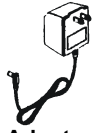
> Note: Do not attempt to service this unit yourself. All service must be performed by qualified service personnel.

Problem	Cause/Corrective Action
Warning tone and NO SERVICE message	• Make sure the base station antenna is fully vertical. • Move closer to the base station. • Check for LOW BATT warning. • Select a different channel on your handset
Warning tone and blank display	• Select a different channel on your handset.
After Talk button is pressed, handset displays blank screen	• Make sure the base station power is on. • Make sure the base station is connected to the PBX. • Battery may be weak. Charge the battery without interruption for 5 hours.

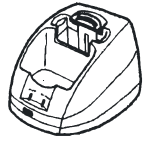
Problem	Cause/Corrective Action
Charge light won't come on when headset is placed in charging unit.	• Make sure the AC adapter is plugged into the base station and wall outlet. • Make sure handset is properly seated in charging unit. • Make sure the battery is properly placed in the handset. • Make sure the charging contacts on the handset and charging unit are clean.
Conversation interrupted by other conversations or excessive static	• Select a different channel on your handset.
Conversation is interrupted frequently.	• Make sure the base antenna is fully vertical. • Move closer to the base. • Check for LOW BATT warning.
Handset does not ring	• Battery may be weak. Charge the battery without interruption for 5 hours. • Make sure the base station antenna is fully vertical. • The handset may be too far away from the base station. • Ensure the ringer ON/OFF switch is in the ON position.

Service Parts and Accessories

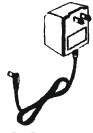
SERVICE PARTS



AC Adapter for Charging Unit AD970



Charging Unit without AC Adapter EXP9785



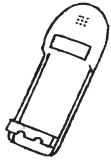
AC Adapter for Base Station EXP9704

800 mAH DC 3.6V Rechargeable Battery BT2499

Belt Clip (Assembled) EXP9702

Wall Mount Adapter EXP9660

OPTIONAL ACCESSORIES



Leather Case
VB-44249ALC

Headset
VB-44249HS

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06/2001

Printed in USA **P/N 545X05201**